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Critical review

What is the 'Just Transition'?

Raphael J. Heffron[a,b,*], Darren McCauley[c]

[a] Jean Monnet Professor in Energy & Natural Resources Law & Policy, Queen Mary University of London, London WC2A 3JB, UK
[b] Centre for Energy, Petroleum, Mineral Law and Policy (CEPMLP), University of Dundee, Dundee DD14HN, Scotland, UK
[c] Department of Geography and Sustainable Development, University of St. Andrews, College Gate, St Andrews, KY16 9AJ Fife, Scotland, UK

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ABSTRACT

The 'just transition' is a concept receiving more attention in the literature to-date. This critical review discusses this and how there are overlaps with literature on energy, environmental and climate justice. Within the separate energy, environment and climate change scholar communities, there is too much distortion of what the 'transition' means and what 'justice' means, and they all should be understood within the just transition concept. To increase public understanding and public acceptance of a just transition, these research communities need to unite rather than continue alone.

1. Introduction – What is the *Just Transition*?

Within climate, energy, and environmental (CEE) scholar communities, transition means different things because each conceptualize 'justice' in distinct ways. Therefore, in ensuring a 'just transition' to a low-carbon economy, how can society support such a process when there are mixed visions of its meaning? These three research areas all have their own version of 'justice scholarship' – i.e. energy justice (McCauley et al., 2013), environmental justice (Capek, 1993; Walker and Buckeley, 2006), and climate justice (Caney, 2014). At their simplest these three forms of justice can be defined as: (1) climate justice concerns sharing the benefits and burdens of climate change from a human rights perspective; (2) energy justice refers to the application of human rights across the energy life-cycle (from cradle to grave); and (3) environmental justice aims to treat all citizens equally and to involve them in the development, implementation and enforcement of environmental laws, regulations and policies. To-date there has been very limited research in uniting these perspectives, and we advance a conceptualization, the 'just transition', which encapsulates all three perspectives.

In critically reviewing the transition literature, we show how scholars in the CEE are distorting attempts at achieving a just transition within societies. In considering space and time, there needs to be a realization of when justice concepts within the CEE research scholarship apply. We advance that the emerging area of legal geography, allows for interdisciplinary scholarship on the concept of justice, as it applies across space and time, and in particular in relation to CEE (see for example: Blacksell et al., 1986; Delaney, 2003; Blomley, 1994). Finally, forms of justice, i.e., whether, energy, environmental or climate, need to relate to society more clearly, with the concept of the just transition offering a path forward as we hope to trace and show.

2. Why the need for a united *Just Transition* concept?

There are many reasons why there needs to be a united *Just Transition* concept and a number of the most important are detailed below. In researching in the CEE area there needs to be a realization of realities of the world, i.e. that research needs a global perspective and actions even at a local level have national and international effects. In CEE research this issue has been identified recently with Agyeman (2014) acknowledging that environmental justice scholars need to ensure their research scope is global and human right focused rather than just civil rights and locally focused; and this is similar to energy justice scholars (Heffron and McCauley, 2017). Forsyth (2014) has in a similar way called for climate justice scholars to have a more global perspective.

In considering notions of time and space, the world is witnessing an acceleration of events in different locations of the world that demonstrate that too many damaging events are occurring – such as, the seven climate records broken in 2016. The just transition captures the 'just' process when societies move towards an economy free of CO_2 emissions. Justice is an important element to the transition, because often the rhetoric of governments, companies, institutions and researchers discuss 'a transition to low carbon economy' and then there is no mention of 'just'.

Transitioning away from fossil fuels in society, however, is proving to be very difficult and slow. For example, in 2016, fossil fuels accounted for 81.5% of the UK's primary energy needs, down only half a

* Corresponding author at: Jean Monnet Professor in Energy & Natural Resources Law & Policy, Queen Mary University of London, London WC2A 3JB, UK.
E-mail addresses: raphael.heffron@gmail.com (R.J. Heffron), dam7@st-andrews.ac.uk (D. McCauley).

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percent from 2015 (Carbon Brief, 2017). Consider other examples from the UK in relation to investment in energy infrastructure and also foreign aid: in 2016, £18.6 billion (10.3% of total investment in the UK) was invested, of which 34% was in oil and gas extraction, 54% in electricity, 11% in gas, with the remaining in coal extraction, and coke & refined petroleum products industries (BIES and UKSA, 2017). Now while the amount of investment in electricity is not presented in more detail, considering the majority of the electricity sector (54%) is fossil fuels (BIES and UKSA, 2017), one could make the assumption that the majority of this investment is similarly towards fossil fuels. Further, the continued support to fossil fuels by the UK is exemplified by UK foreign investment policy where through development aid, the UK supports by a ratio of nearly two to one, fossil fuel projects (CAFOD, 2017).

Globally, there are also problems as was mentioned earlier that identify the need for change. For example, seven climate records were broken last year in 2016: melting of Arctic ice; consecutive hottest months; hottest day in India ever; highest temperature in Alaska; consecutive and biggest annual increase in CO_2; hottest Autumn in Australia ever; and highest amount of destruction in Australia's Great Barrier Reef (The Guardian, 2016). Further, coal plant construction is on the increase, particularly, in many developing countries. Indeed, there exists far too much fossil fuels in the global energy system (Figueres et al., 2017). Hence, at an international level, it should be acknowledged that the transition needs to happen at an accelerated pace, while its slowness, however, is the norm (Figueres et al., 2017).

One of the problems for the transition is the focus of CEE research and the economic focus of the transition. Traditional economics has not really delivered positive 'just' outcomes for society. If anything, it has significantly added to societal inequality; and in terms of traditional economics, it is held here that the neo-classical school of thought still dominates economic policy-making and this echoes with research done in the fossil fuel community too (Rist, 2016).

Hence, one could ask why has there not been more reform? Why has society not moved on from an economics-driven transition? Some of answers are clear, for as society was faced with powerful elites, it struggled to reform. For example, the failure to reform the financial system post-crisis of 2007–2009 demonstrates the willingness of societies to accept ongoing policy failure. Clear parallels of what society will accept is evident in the ongoing failures of policy in CEE areas; for example, recent international debate and change of rhetoric where the energy source 'gas' is now classed as a 'cleaner fuel' or even 'transition fuel', and a lower-carbon energy source.

However, despite the powerful influence of research elites and traditional economic-driven policy-making, these are surmountable challenges. It should be recognized that these two latter groups have had notable success in how they have achieved clarity around their research and this in turn has increased the public acceptance and understanding of their work. Unfortunately, the majority of different communities within CEE research areas all treat their concepts as separate constructs despite time and space being in a state of constant evolution and that they have a similar goal of a low-carbon economy. Indeed, it is time for more work to provide a united perspective on justice scholarship in the three areas of CEE, and it is through the just transition concept that this can be achieved.

3. Merging of the three CEE justices under the just transition concept

The areas of CEE all have their own forms of justice as stated earlier. Each is a concept widely accepted by researchers in these areas but to-date there has been little research in connecting all three forms of these justices. The just transition approach involves stakeholders of all types to the transition process. This article advocates that the just transition concept provides a more inclusive approach and as a framework encapsulates all three CEE justice communities. Further, the just transition is a concept that all stakeholders can engage with rather than having to understand all three forms of CEE justice.

There is a need to debate, discuss, research and apply the just transition. Government's worldwide are utilizing the term (or words to the effect of) 'transitioning to a low-carbon economy'. This latter term is promoted by the *status quo*, i.e. those in the dominant position in society. This is because the 'low-carbon economy transition' has and will allow for a very slow transition and also one that favors this *status quo* and consequently will result in a continuation of the ongoing inequality in society.

The benefit of a just transition is its aim is to reduce inequality in modern society, which it achieves by applying justice in the areas of CEE. Inequality in society is increasing worldwide, and it represents one of the major research challenges in present day research scholarship across many disciplines (see: Stiglitz, 2012; Piketty, 2015; Scheidel, 2017; Atkinson, 2015). With inequality continuing to increase in society, policy reform to correct inequality clearly represents an example of policy failure. Just transition scholarship can contribute to remedying this policy failure and also contribute to scholarship on reducing inequality. An example of this is from the leading economist Thomas Piketty who as part of a research team demonstrated that there is a link between the increase of CO_2 emissions and the inequality in society (Chancel and Piketty, 2015).

Overcoming the 'inequality' issue needs all three CEE justice areas to have a clear end-result. They should have a more normative and holistic view of society and how they therefore contribute to a just transition. The success of CEE forms of justice is open to question and we need to ask what have they achieved to date? Given the continued problems that society faces, it could be argued that all three forms of justice have had very limited success to-date. Inequality and the ill-effects of events in relation to CEE continue to happen worldwide in the developed and the developing world.

It is advanced here, that a more united approach by these three CEE justice research communities could have more impact. Too often with these perspectives there is a limited focus on the origin of the event that leads to inequality and injustice. In particular, this is evident in relation to climate and environmental justice where the focus is on adaptation, i.e. the bad 'event' having occurred already, and only then solutions are discussed as to how to reduce the damage. Energy justice, it should be stated, for some scholars at least aims to address inequality and injustice before the 'event' happens.

Overall, all CEE forms of justice need to focus more on the 'event' that is under research or that has triggered the research. In this study of an 'event', or series of events, a greater focus on time and place is needed. For example, with time, the issues are the 'pace' of change and the 'timelines' of the transition. In terms of place, where do these events happen and to what locations do inequalities and injustices reach or occur, are important.

At some different points in the analysis of the 'event' the different forms of CEE justice are more relevant; however, the focus of the scholar should be on a more holistic analysis of the event and its contribution to a just transition. This process of thinking is represented in the diagram below in Fig. 1. For example, energy justice becomes relevant before or when an event is happening and there is a short-term focus, i.e. the aim is to change a decision as to whether something will or will not happen at a particular energy infrastructure site. This diagram is just an example and but it aims to highlight that the different CEE forms of justice have traditionally become relevant at different times over an 'event', and the just transition can bring a more united and complete perspective and encapsulate all three at the same time.

4. Application of legal geography

In researching on just transition issues, there are two main academic literatures that engage with it and these are law and geography; however, it is increasingly becoming an interdisciplinary research area. Law with 'justice' and geography where the focus is on where and when the

Event Timeline		
(1)Event planned & happens	(2)Damage occurs	(3)Future Impact (& which is far away)
Form of Justice researched		
(1)Energy Justice	(2)Environmental Justice	(3)Climate Justice
Event Time & Impact		
(1)Short-term	(2)Medium-Term	(3)Long-term
Space (i.e. location)*		
(1)Local	(2)National	(3)International
*all events will have a local, national, international element to them but in general the public will interact more with events that concern societies just transition to a low-carbon economy as this will impact on their income and wellbeing to a greater extent		
Diagram Explanation All the #1s are related as are the #2s and the #3s		

Fig. 1. Event Analysis, the use of Energy, Environmental and Climate Justice.
Source: Constructed by authors (2017).

impacts of injustices are major contributors to transition research. It is important when conducting interdisciplinary research to make connections across disciplines and there is already a clear relationship between law and geography through the emerging field 'legal geography'.

Legal geography provides a useful approach for the study of the just transition. Legal geography captures research on people, space, time and law (Blacksell et al., 1986; Delaney, 2003; Blomley, 1994). It is an area that has been researched since the 1980s and is enjoying a resurgence and should do so in particular due to CEE issues and therefore the just transition.

The reason for thinking of the adoption of a new and more formalized way of thinking (i.e. through legal geography) is that there exists significant research in the CEE justice literature that avoids discussion on the legal context of 'justice'. Too often it is not clear in this CEE justice research: (1) what justice is needed and/or expected; and (2) how this will be enforced and/or applied. Law works in a system, and without the application for example of restorative justice, then the application of justice that enables greater distributional justice may never have the expected effect. For too long it is clear that researchers have advanced the application of different forms of justice through one of the CEE areas only not to elaborate on how and/or whether in reality it could be achieved; and very similar criticism is noted by other scholars (Jamal and Hales, 2016).

This can be further evidenced by the following example. It should be recalled that the origin of environmental justice was in social protests in the US (Agyeman, 2014). Justice was viewed to be applied if the protesting group were successful and they forced a legal and/or policy change to a project, i.e. there was a result. There needs to be a return to that clarity of thought with the just transition. More results are needed, i.e. two recent results for example from the UK in relation to a just transition is the phasing out of coal plants by 2025 and diesel cars by 2040. These are both positive results for a just transition in the UK. In comparison, there are negative results for the just transition in the following two examples: (1) in 2017 the UK House of Commons announced that an electricity capacity auction should be technology neutral – hence it will favor fossil fuels, which can bid in cheaper; and (2) as highlighted earlier, the UK supports fossil fuels through foreign aid.

Those previous UK examples identify a clear imbalance in overall policy towards a just transition. However, the benefit of a framework in legal geography is that it permits the researcher to identify the problems, and provide research and policy-led solutions. Fig. 2 outlines below a legal geography perspective on the just transition. The framework advanced is quite simple, the "JUST" Framework. It borrows from law and geography and also the three forms of justice across CEE. It is outlined below and many will be familiar with the types of justice mentioned below, which are explained already in the literature. Future research will identify them in more detail later as they apply specifically to the just transition.

5. Steps in the future development of the just transition

In thinking of the evolution of the just transition and also the justices of CEE, it is clear that there needs to be a measureable outcome from an action. The measure in the majority of these forms of justice is not quantitatively measured but can be assessed through whether it results in a direct change in a law and/or policy, or more simply, where a previous decision is overturned or improved. Over time scholars have worked on justice in their research but there has been limited scholarship as to the broader goal of a just transition. A just transition is a societal goal, and the three communities of CEE justice scholars need to think together and have as their common purpose a just transition.

To ensure the debate around a just transition and its effect on policy-making are not another policy distorted by the traditional economic thinking, there needs to be a more united framework across CEE justice. To move society towards a just transition, the importance of public acceptance and understanding are crucial to ensure they act towards and support such a transition. And a just transition concept that unites the CEE justice fields can result in significant increases in public acceptance and understanding.

Time is of the essence for society and an accelerated just transition is needed, given all the issues in society related to CEE sectors. The question has to be asked what have the different forms of CEE justice achieved? Albeit energy justice is a newer concept, but it is also strange that it is so, since the energy sector is primarily responsible for the CO_2 emissions which is the main focus of environmental and climate justice scholarship. Further, many sectors in the economy rely heavily on energy, such as transport, industry and even human effort (energy from food provided by the energy intensive agricultural sector). The application of justice in the energy sector has clearly been a forgotten issue and the dominance of economics and big energy companies may explain why it was not a feature until recently; for a recent account of the development of energy justice, see Heffron and McCauley (2017). The just transition can account for these issues and encapsulate those from across CEE justice scholarship.

J	TRANSITION	Justice	Justice takes the form of 3 forms of justice Distributional Procedural Restorative
U		Universal	Universal takes the form of two universal forms of justice Recognition Cosmopolitanism
S		Space	Space brings in location, where are 'events' happening ? (in principle, at local, national and international levels)
T		Time	Time brings into transition timelines such 2030, 2050, 2080 etc. and also 'speed' of the energy transition (i.e. is it happening fast enough?).

Fig. 2. The Legal Geography 'Just' framework for the Just Transition.
Source: Constructed by authors (2017).

It is advanced here that legal geography, which incorporates two key disciplines working together on a framework on the just transition, can deliver more realistic research conclusions and therefore more achievable law and policy options. Research on a just transition needs to learn from the limitations of CEE justice research and refocus on being result-driven since the speed of the transition is a major concern globally (Figueres et al., 2017).

The major contribution of uniting CEE justice is the added potential to contribute to reducing inequality and injustice in society as it relates to CEE sectors and aims to achieve a just societal transition. Both law and geography have long histories in research on inequality and injustice; it is time to ensure they are added to the debate on CEE issues and that the dominance of traditional economic thinking is reduced. The *status quo* in relation to issues in CEE policy and sectors needs to be challenged in research and practice. Researchers on CEE justice need to integrate their work into the bigger picture, i.e. the just transition, and focus on the implications of their work for this just transition to low-carbon economies.

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